

# APPENDIX A. TECHNICAL APPENDIX

This appendix contains technical notes and detail on the Year Two PBA system.

## A. NOTES ON DATA REPORTING CHANGES

The following points describe key differences in the data reporting between the Year One and these Year Two reports.

1. The categories for "Age" in the demographic analysis of each cohort were slightly different in the standardized data tables in these second year reports, as shown in **TABLE A-1**.

**TABLE A-1**  
**AGE CATEGORIES IN STANDARD TABLES**

<b>Year One Report</b>	<b>Year Two Report</b>
<18	<18
18-24	18-24
25-54	25-39
	40-54
55-64	55-64
65+	65+

2. The "Amount of Training/Services Provided" was presented in the standardized data tables in slightly different categories in these second year reports, as shown in **TABLE A-2**.

**TABLE A-2**  
**AMOUNT OF TRAINING/SERVICE CATEGORIES IN STANDARD TABLES**

<b>Year One Reports</b>		<b>Year Two Reports</b>	
<b>Hours Category</b>	<b>Rationale</b>	<b>Hour Category</b>	<b>Rationale</b>
Less than 8 Hours	Minimal intervention; represents very short-term interventions such as half day job search work shops, writing a resume workshops, or someone who attends a job club two hours a week for a month.	Less than 8 hours	Same
8 to 100 hours	More than a minimal intervention and less than a full 3 unit course.	8 to 47 hours	Equivalent to less than a 3 unit course in the community colleges.
		48 to 191 hours	Equivalent to 3 to 11.99 units at the community colleges.
101 to 485 hours	Training beyond routine employer provided training, but less than 12 semester units. Most ETP training fell into this category, as well as most non-degree or certificate vocational education. Similarly it captured as much as a 12 week full-time on-the-job training program.	192 to 383 hours	Equivalent to 12 to 23.99 units at the community colleges.
		384+ hours	Equivalent to 24+ units at the community colleges.
Over 485 hours	This category contained trainees who completed a substantial part of a full vocational education degree or certificate program.		

- There were slight changes to the Classification of Instructional Program (CIP) code listing this year to accommodate programs that were unique to the California community colleges.

## B. 1996-97 COHORT ANALYSES

**Table A-3** presents the frequency with which individual SSNs submitted by each program were also found in the cohort of other programs. Please note that these may be duplicative counts. For example, if the same SSN submitted to the PBA system by JTPA was also found in CTB and the Community College program cohorts, it would appear twice in the row for JTPA.

**TABLE A-3  
INDIVIDUALS FOUND PARTICIPATING IN MORE THAN ONE PROGRAM  
1996-97 PBA SYSTEM COHORT**

SSN Submitted By:	SSN Also Found In:							
	COCCC	CTB	CDC	ETP	GAIN	Job Service	JTPA	Dept. of Rehab
<b>COCCC</b>		796	103	340	6	729	1,007	210
<b>CTB</b>			11	601	2	824	5,826	42
<b>CDC</b>				8	0	732	364	11
<b>ETP</b>					0	65	86	8
<b>GAIN</b>						126	17	2
<b>Job Service</b>							3,416	82
<b>JTPA</b>								177
<b>Dept. of Rehab</b>								

**Table A-4** presents the number of participants from each program's cohort that were found in more than one of the employment databases used in this Year Two report:

- California Employment Development Department- Base Wage Files (CA EDD);
- U.S. Department of Defense - Active Duty Military (DOD); and,
- U.S. Office of Personnel Management (OPM).

**TABLE A-4**  
**PERCENT OF EACH PROGRAM COHORT FOUND IN MULTIPLE EMPLOYMENT DATABASES**

SSN FOUND IN:	PROGRAM															
	COCCC		CTB		CDC		ETP		GAIN		Job Service		JTPA		Dept. of Rehab	
	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort	Number	Percent of Cohort
Only One Source	105,404	81.3%	18,692	86.4%	23,281	43.2%	30,830	96.6%	522	57.9%	45,770	74.6%	40,036	81.9%	8,210	82.1%
CA EDD and DOD	401	0.3%	19	0.1%	13	0.0%	6	0.0%			75	0.1%	25	0.1%	18	0.2%
CA EDD and OPM	584	0.5%	122	0.6%	17	0.0%	15	0.0%	1	0.1%	362	0.6%	186	0.4%	28	0.3%
DOD and OPM	18	0.0%	1	0.0%	1	0.0%	1	0.0%			3	0.0%	2	0.0%		
CA EDD and DOD and OPM	12	0.0%	3	0.0%							6	0.0%	4	0.0%		
None	23,309	18.0%	2,795	12.9%	30,528	56.7%	1,051	3.3%	378	42.0%	15,110	24.6%	8,644	17.7%	1,747	0.0%

Reviewers of the PBA system frequently comment on the large amount of historical information gathered to determine before program participation employment and earnings. **Table A-5** presents the distribution of the dates (by year) participants in the 1996-97 PBA system cohort started receiving training programs or services.

**TABLE A-5**  
**DISTRIBUTION OF PARTICIPANTS' PROGRAM START DATE, BY YEAR**  
**1996-97 PBA SYSTEM COHORT**

Year of Program Start Date	PROGRAM							
	COCCC	CTB	CDC	ETP	GAIN	Job Service	JTPA	Dept. of Rehab
Unknown Start Date			5		1			
1982 and earlier			37					
1983-1988		5	435					108
1989		19	276		12			72
1990		41	574		10			130
1991		206	935		12		4	223
1992	24183	531	1735		17		6	392
1993	15643	667	3614	149	24		62	1092
1994	15411	503	9705	212	50		607	2435
1995	16721	2302	23156	11412	59		6326	3824
1996	40623	14056	13347	17939	486	31220	32318	1595
1997 (through June 30)	17147	3302	21	2191	230	30106	9574	132
Total Program Cohort	129728	21632	53840	31903	900	61326	48897	10003

## C. EARNINGS REPORTING

All earnings in the Year Two report are presented adjusted to 1995 constant dollars, and compared to four benchmark earnings rates. This section presents the detail to the adjustments and the benchmarks.

### CONSTANT DOLLAR ADJUSTMENTS

In order to make valid comparisons of earnings rates across different years, it is necessary to transform the dollar amounts into a constant metric. This is accomplished by factoring all dollars to 1995 using the California Department of Finance Consumer Price Index (CPI) for each quarter. The year 1995 was selected since it is the mid-point of the decade under study. By the Year Four reports, it is anticipated that the constant year will switch to 2000.

### COMPARISON BENCHMARKS

To provide a context for the reported earnings, the PBA Committee requested that all earnings be reported against four benchmark earnings rates:

- Average annual wages for total manufacturing in California;
- California's minimum wage annual equivalent;
- The federal poverty guideline for a three-person family; and,
- The federal poverty guideline for a one-person family.

These benchmarks were selected to provide a range from an expected high salary rate for manufacturing, to the poverty level. All benchmarks were annualized, and adjusted to 1995 constant dollars using the CPI at the end of March of the benchmark year.

The benchmarks used in the Year Two report were derived as follows:

1. The California Employment Development Department reports the U.S. Bureau of Labor Statistics data for average weekly earnings for statewide manufacturing occupations in California (<http://www.calmis.cahwnet.gov/htmlfile/subject/indh&e.htm>):
  - For 1997, average weekly earnings of \$554.76 for total manufacturing occupations were multiplied by 52 weeks, adjusted to 1995 constant dollars by dividing by 1.037, for an annual equivalent of \$27,818.
  - For 1996, based on average weekly earnings of \$532.86 for total manufacturing occupations, multiplied by 52 weeks, adjusted to 1995 constant dollars by dividing by 1.014, for an annual equivalent of \$27,326.
2. The California Department of Industrial Relations provides information on the State's minimum hourly wages.
  - For 1997, the minimum hourly wage rate of \$5.15 per hour as of September 1, 1997, was multiplied by 2080 hours per year, adjusted to 1995 constant dollars by dividing by 1.037, for an annual equivalent of \$10,330.
  - For 1996, the minimum hourly wage rate of \$4.75 per hour as of October 1, 1996, was multiplied by 2080 hours per year, adjusted to 1995 constant dollars by dividing by 1.014, for an annual equivalent of \$9,744.

3. The U.S. Department of Health and Human Services publishes the federal poverty guidelines for a one- and a three-person family in March of each year.
  - For 1997, the federal poverty guideline for a one-person family was \$7,890, adjusted to 1995 constant dollars by dividing by 1.037, for an annual equivalent of \$7,608.
  - For 1996, the federal poverty guideline for a one-person family was \$7,740, adjusted to 1995 constant dollars by dividing by 1.014, for an annual equivalent of \$7,633.
  - For 1997, the federal poverty guideline for a three-person family was \$13,330, adjusted to 1995 constant dollars by dividing by 1.037, for an annual equivalent of \$12,854.
  - For 1996, the federal poverty guideline for a three-person family was \$12,980, adjusted to 1995 constant dollars by dividing by 1.014, for an annual equivalent of \$12,801.

## **D. PERFORMANCE MEASURES**

**Table A-6** on the following pages presents the detailed operational definitions of the performance measures adopted by the PBA Committee for this year of the Performance-Based Accountability system for California's Workforce Preparation Programs.

The following technical notes pertain to the calculation of the performance measures.

1. The performance measures were calculated in terms of quarters. This is because unemployment insurance and wage data are collected and reported quarterly during each calendar year. Thus, four quarters equals a twelve-month or one year period. Most performance measures are reported in terms of four quarters, or one year before and/or after training or services.

The date used to determine the first quarter after training (denoted as +Q1) was the start of the first full quarter after the program termination date. The date used to determine the first quarter before training (denoted as -Q1) was the first full quarter prior to the start date of services.

2. Persons aged less than 21 were not specifically excluded from any measure, including the two measures (Earnings Change and Change in Weeks of UI) which examined change from before and to the first or second years after program participation. This has been noted as a potential deficit in the calculations for programs such as the community colleges, which serve individuals aged less than 21 who should not be expected to have a strong attachment to the labor force prior to training
3. In Measure 3 Earnings: Before and First Year After Program Participation, two of the before program groups are defined based on earnings greater than, equal to, or less than the minimum wage. The minimum wage is determined separately for each participant, using a look-up table of minimum wage rates applicable in the second quarter prior to that individual's program start dates.

**TABLE A-6: PERFORMANCE BASED ACCOUNTABILITY SYSTEM YEAR TWO MEASURES**

PERFORMANCE MEASURES	OPERATIONAL DEFINITION	COMMENTS
Number in 1996-97 Cohort	Individuals completing program participation or services between July 1, 1996 and June 30, 1997	
<b>EMPLOYMENT RATE</b>		
<b>1. EMPLOYMENT RATE: FIRST YEAR AFTER PROGRAM PARTICIPATION</b>		
Number and Percent Found in any employment source <sup>1</sup> in the following numbers of quarters in the <u>first</u> year after program participation:	Number and percent of total cohort receiving \$1 or more in wages per quarter cumulative in any 0, 1, 2, 3, or 4 of the four quarters (+Q1, +Q2, +Q3 and +Q4) after program participation.	This approach indicates how much participants were working after program participation, but it does not indicate trends over time. For Year Two, the quarterly employment rate uses only CA EDD wage information.
Zero (0) Quarters (none of 4 after program participation)		
One Quarter (any 1 of 4)		
Two Quarters (any 2 of 4)		
Three Quarters (any 3 of 4)		
Four Quarters (All 4)		
Total Percent Found Employed in CA UI-Covered Employment	Sum of all members of cohort found in employment in CA EDD databases in at least one quarter after program participation.	
Total Percent Found from Each Source	Percent found in each employment database (Percents may add to more than 100% if have duplicates.)	For Year Two, employment sources include: <ul style="list-style-type: none"> <li>• CA EDD;</li> <li>• Federal DOD- civilian and active duty</li> <li>• Federal OPM.</li> </ul>
Total Percent Found Employed from All Sources	Percent found employed from all three employment sources, unduplicated count based on unique SSNs within a program	
Percent of Individuals Found in Multiple Employment Databases	Percent found in more than one employment database.	This table at the programwide level only, with table showing overlap in Program chapter text only.

<sup>1</sup> The California Unemployment Insurance (UI) and Base Wage databases do not include federal employees, self-employed individuals, certain public officials, some family and household domestic workers, workers while on strike, or persons not in the workforce.



**TABLE A-6: PERFORMANCE BASED ACCOUNTABILITY SYSTEM YEAR TWO MEASURES**

PERFORMANCE MEASURES	OPERATIONAL DEFINITION	COMMENTS
<b>2. EMPLOYMENT RATE: SECOND YEAR AFTER PROGRAM PARTICIPATION</b>	<p>Divide cohort into two groups depending on whether found or not found employed in +Q4. For each group calculate the number and percent found receiving \$1 or more in wages in all four quarters, or in any 1, 2, or 3 quarters in the third year after program participation (+Q9, +Q10, +Q11, and/or +Q12), or not found.</p> <p>For Year Two - Divide 1995-96 cohort into two groups depending on whether found or not found employed in +Q4. For each group calculate the number and percent found receiving \$1 or more in wages in all four quarters, or in any 1, 2, or 3 quarters in the second year after program participation (+Q5, +Q6, +Q7, and/or +Q8), or not found.</p>	<p>In Year Two this measure is calculated for the second year after departure from program participation for the 1995-96 cohort.</p> <p>The original specifications for the PBA system call for this measure to be calculated only for the third year after program participation, and then for the fifth year after program participation.</p> <p>Note that if found with multiple employers, count as found only once. Count if found with any employer.</p>
<b>EARNINGS MEASURES</b>		
<b>3. EARNINGS: BEFORE AND FIRST YEAR AFTER PROGRAM PARTICIPATION</b>		<p>All earnings and benchmark wage rates are discounted to 1995 levels to direct comparability across years, and to provide consistency with the Year One reports.</p> <p>The PBA Committee authorized removing federal earnings from this measure, since before program participation earnings from federal sources were not available in Year Two.</p>
<b>Before Program Participation Groups</b>	The cohort is divided into four groups based on whether were found with earnings (from any employer) or were not found at all (any source) or found with no earnings, in the four quarters prior to program participation/services.	There are two "Not Employed" groups: one for which there is evidence they were in CA before program participation, and one which is totally not found in any source.
Earnings Greater Than or Equal to Annual Minimum Wage Before	Actual annual earnings for individuals earning greater than or equal to the minimum wage in the period from -Q1 through -Q4.	Full-time minimum wage calculated using minimum hourly wage as of the beginning of each participant's -Q2, times 40 hrs/wk times 52 weeks.
Earnings Less Than Annual Minimum Wage Before	Actual annual earnings for individuals earning less than full-time at minimum wage but greater than or equal to \$1 in the period from -Q1 through -Q4.	
Found in CA, Zero Earnings Before	Individuals not found with earnings, but found receiving UI, or eligible for AFDC or SSI/SSP in the period from -Q1 through -Q4.	Zero earnings will be imputed for this group in the change in earnings calculations. This group also includes individuals with earnings less than \$1 but more than \$0.
Not Found in CA Before	Not found in any of the California databases in the period from -Q1 through -Q4.	For Year Two, this group also includes individuals found only in the DOD or OPM databases, since they are lacking sufficient earnings information.

**TABLE A-6: PERFORMANCE BASED ACCOUNTABILITY SYSTEM YEAR TWO MEASURES**

PERFORMANCE MEASURES	OPERATIONAL DEFINITION	COMMENTS
<b>After Program Participation Sets</b>	The cohort is divided into the following four after program participation sets (earnings from any employer, any source):	Note that the AFTER program participation earnings sets are defined based on quarters found employed.
Earnings All Four Quarters After	Earnings greater than \$1 in each of +Q1, +Q2, +Q3 and +Q4.	
Earnings Any of the Four Quarters After	Earnings greater than \$1 in any four, three, two or one quarters of +Q1, +Q2, +Q3 and +Q4 (includes those found in all four quarters).	
Found in CA, Zero Earnings All Four Quarters After	No earnings (or total earnings less than \$1) in CA EDD base wage file, but found receiving UI, or eligible for AFDC or SSI/SSP, in any of +Q1, +Q2, +Q3 and +Q4.	This set includes individuals with earnings less than \$1.
Not Found in CA After	Not found in any of the CA databases in +Q1 through +Q4.	For Year Two, this set also includes individuals found only in the DOD or OPM databases, since they did not have exact earnings information.
<b>Change in Earnings Measures</b>		For each of the groups and sets defined above, the following earnings measures will be calculated where appropriate. Note that zeros were imputed for the Found in CA, Zero Earnings Before group, and the Found in CA, Zero Earnings All Four Quarters After set. No change calculation was made for the Not Found in CA Before group, or the Not Found in CA After set.
Number of participant records for each Before program participation group and First Year After program participation set	Counts for each of the four Before program participation groups and four After program participation sets	
Before program participation Earnings	Median earnings in -Q1, -Q2, -Q3, and -Q4	
First Year After program participation Earnings	Median earnings in +Q1, +Q2, +Q3 and +Q4	
Median Change in Earnings	Median of earnings difference. Second Year – First Year earnings difference is calculated; the median of these differences is reported.	Change in Earnings is not calculated for the Found in CA, Zero Earnings All Four Quarters After, and Not Found in CA After, sets.
<b>4. EARNINGS: FIRST AND SECOND YEAR AFTER PROGRAM PARTICIPATION</b>	The operational definition parallels Year Two's adopted Measure 3. The 1995-96 cohort is divided into four Before program participation groups (based on earnings and found status), and four After program participation sets, based on their status in +Q1 through +Q4.	Note that this longitudinal measure deals with earnings only; Measure 2 provide the longitudinal employment rate. All wages and benchmark wage figures are discounted to 1995 constant dollars to provide comparability across years.
Median Earnings Before Program Participation	Median earnings in -Q1 through -Q4	
Median Earnings First Year After	Median earnings in +Q1 through +Q4, as defined	
Median Earnings Second Year After	Median earnings in +Q5 through +Q8, as defined	
Median Change In Earnings Second Year - First Year	Median of Second Year minus First Year earnings difference.	Change in Earnings is not calculated for the Found in CA, Zero Earnings All Four Quarters After, and Not Found in CA After, sets.

**TABLE A-6: PERFORMANCE BASED ACCOUNTABILITY SYSTEM YEAR TWO MEASURES**

PERFORMANCE MEASURES	OPERATIONAL DEFINITION	COMMENTS
<b>OTHER YEAR TWO MEASURES</b>		
<b>5. CHANGE IN UNEMPLOYMENT INSURANCE (UI) STATUS</b>	For Year Two, each program cohort was divided into two groups: those who received UI payments of greater than \$1 in any of the four quarters before program participation (-Q1 to -Q4); and those who did not.	Note that this measure has changed from Year One.
Change in Receiving California UI Before and After Program Participation	Provide counts of each of four groups: those who received CA UI before and those who did not; and those who received CA UI in the first year after (+Q1 through +Q4), and those who did not. Calculate percent of total cohort of each group.	
Annual Average Number of Weeks of UI Received Before Program participation	For those who received UI, provide sum of number of weeks of UI greater than \$1 in -Q1 through -Q4.	
Annual Average Number of Weeks of UI Received After Program participation	Sum of number of weeks of >\$1 UI payments per quarter in any of the quarters after program participation (+Q1 to +Q4), calculated for each of the two before groups (received UI and did not receive UI).	Number of cohort members in each before and after group (received UI and did not receive UI) is also provided.
Change in Annual Average Weeks of UI	Average numbers of weeks of UI received after program participation minus average number of weeks of UI received before program participation.	The change in weeks of UI measure as defined in Year Two is calculated only for persons found receiving UI both before and after program participation.
<b>6: CHANGE IN STATUS FROM TAX RECEIVER TO TAX PAYER</b>		Two calculations are performed, one for change in weeks of eligibility for AFDC and one for change in months of eligibility for SSI/SSP.  The change in eligibility for food stamps was originally intended to be included, but those data were not used due to unreliability of the data.
Number of Records in Before and After Program participation AFDC Sample	Number found receiving AFDC in any of the 12 months before program participation .	Subsample includes persons found in MEDS file as eligible for CA AFDC any portion of the year before program participation.
Annual Average Number of Months of AFDC Received Before Program participation	Sum of number of months receiving AFDC in 12 months before program participation divided by total subsample defined above	
Annual Average Months of AFDC Received After Program participation	Sum of number of months receiving AFDC in 12 months after program participation divided by total subsample defined above.	
Change in Annual Average Months of AFDC	Before program participation average minus after program participation average.	

**TABLE A-6: PERFORMANCE BASED ACCOUNTABILITY SYSTEM YEAR TWO MEASURES**

<b>PERFORMANCE MEASURES</b>	<b>OPERATIONAL DEFINITION</b>	<b>COMMENTS</b>
Number of Records in Before and After Program participation SSI/SSP Sample	Number found receiving any SSI and/or SSP in any of the 12 months before program participation .	Subsample includes persons found in MEDS file as receiving SSI and/or SSP any portion of the year before program participation.
Annual Average Number of Months of SSI/SSP Received Before Program participation	Sum of number of months receiving SSI and/or SSP in 12 months before program participation divided by total subsample defined above	
Annual Average Months of SSI/SSP Received After Program participation	Sum of number of months receiving SSI and/or SSP in 12 months after program participation divided by total subsample defined above.	
Change in Annual Average Months of SSI/SSP	Before program participation average minus after program participation average.	
<b>MEASURES UNDER CONSIDERATION FOR YEAR THREE</b>		
<b>7. RATE OF ADVANCEMENT TO PUBLIC POST-SECONDARY EDUCATION</b>	Number of each program cohort found enrolled full-time or part-time in either the California Community Colleges, the California State University, or the University of California systems in the first year after program participation.	Measure not calculated in Year One or Year Two due to unavailability of match data.
<b>8. EMPLOYER SATISFACTION</b>		The PBA Committee was presented several alternatives for use of secondary data to infer employer satisfaction. The Committee did not approve any operational definition for a measure of Employer Satisfaction for the Year Two reports.